

FIELD EFFECT TRANSISTOR WITH ELECTROPLATED METAL GATE

ABSTRACT

Disclosed is a method for making a metal gate for a FET, wherein the metal gate comprises at least some material deposited by electroplating as well as an FET device comprising a metal gate that is at least partially plated. Further disclosed is a method for making a metal gate for a FET wherein the metal gate comprises at least some plated material and the method comprises the steps of: selecting a substrate having a top surface and a recessed region; conformally depositing a thin conductive seed layer on the substrate; and electroplating a filler gate metal on the seed layer to fill and overfill the recessed region.